

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): An organozirconium composite comprising one, or at least two kinds of zirconium chelate complexes comprising, as a ligand, both of a first β diketone and a second β diketone having a structure different from that of the first β diketone, wherein when the organozirconium composite comprises at least two kinds of zirconium chelate complexes, the coordination numbers of the first β diketone and the second β diketone that coordinate to at least two kinds of zirconium chelate complexes vary depending on the respective zirconium chelate complexes.

Claim 2 (Original): The organozirconium composite according to claim 1, further comprising at least one of a first β diketone ligand and a second β diketone ligand.

Claim 3 (Original): The organozirconium composite according to claim 1, further comprising at least one of a zirconium chelate complex containing only the first β diketone as a ligand and a zirconium chelate complex containing only the second β diketone as a ligand.

Claim 4 (Original): The organozirconium composite according to claim 1, wherein the first β diketone and the second β diketone are compounds selected from the group consisting of 2,2,6,6-tetramethyl-3,5-heptanedione residue, 2,6-dimethyl-3,5-heptanedione residue, acetylacetone residue, hexafluoroacetylacetone residue, trifluoroacetylacetone residue, trimethyloctanedione residue and diphenylpropanedione residue.

Claim 5 (Original): The organozirconium composite according to claim 1, wherein the zirconium chelate complex is obtained by reacting at least two kinds of β diketone compounds with a zirconium compound.

Claim 6 (Original): The organozirconium composite according to claim 5, wherein the zirconium chelate complex is a complex obtained by reacting at least two kinds of β diketone compounds with a zirconium compound, wherein a mixing ratio of two kinds of β diketone compounds, that is, a mixing ratio of one β diketone compound A with the other β diketone compound B, (A/B), is from 80/20 to 20/80 in terms of molar ratio.

Claim 7 (Original): The organozirconium composite according to claim 5, wherein at least two kinds of β diketone compounds are compounds selected from the group consisting of 2,6-dimethyl-3,5-heptanedione, 2,2,6,6-tetramethyl-3,5-heptanedione, acetylacetone, hexafluoroacetylacetone, trifluoroacetylacetone, trimethyloctanedione and diphenylpropanedione.

Claim 8 (Original): The organozirconium composite according to claim 5, wherein one β diketone compound is 2,6-dimethyl-3,5-heptanedione and the other β diketone compound is 2,2,6,6-tetramethyl-3,5-heptanedione.

Claim 9 (Original): A method of synthesizing an organozirconium composite, which comprises mixing a first β diketone compound with a zirconium chelate complex containing, as a ligand, a second β diketone having a structure different from that of the first β diketone compound.

Claim 10 (Original): The method of synthesizing an organozirconium composite according to claim 9, wherein the amount of the first β diketone compound is within a range from 100 to 1600 mol% based on the zirconium chelate complex containing the second β diketone as a ligand.

Claim 11 (Original): The method of synthesizing an organozirconium composite according to claim 9, wherein the first β diketone compound is 2,2,6,6-tetramethyl-3,5-heptanedione and the zirconium chelate complex containing the second β diketone as a ligand is tetrakis-2,6-dimethyl-3,5-heptanedionate zirconium.

Claim 12 (Original): The method of synthesizing an organozirconium composite according to claim 9, wherein the first β diketone compound is 2,6-dimethyl-3,5-heptanedione and the zirconium chelate complex containing the second β diketone as a ligand is tetrakis-2,2,6,6-tetramethyl-3,5-heptanedionate zirconium.

Claim 13 (Original): A method of synthesizing an organozirconium composite, which comprises dissolving a zirconium compound selected from zirconium butoxide, zirconium chloride and zirconium chloride oxide in an organic solvent, adding a mixed solution containing at least two kinds of β diketone compounds to the resulting solution, and heating the mixed solution under reflux at a temperature higher than a boiling point of the organic solvent contained in the mixed solution.

Claim 14 (Original): The method of synthesizing an organozirconium composite according to claim 13, comprising reacting two kinds of β diketone compounds with a zirconium compound, wherein a mixing ratio of two kinds of β diketone compounds, that is, a mixing ratio of one β diketone compound A with the other β diketone compound B, (A/B), is from 80/20 to 20/80 in terms of molar ratio.

Claim 15 (Original): The method of synthesizing an organozirconium composite according to claim 13, wherein at least two kinds of β diketone compounds are compounds selected from the group consisting of 2,6-dimethyl-3,5-heptanedione, 2,2,6,6-tetramethyl-3,5-heptanedione, acetylacetone, hexafluoroacetylacetone, trifluoroacetylacetone, trimethyloctanedione and diphenylpropanedione.

Claim 16 (Original): The method of synthesizing an organozirconium composite according to claim 13, wherein one β diketone compound is 2,6-dimethyl-3,5-heptanedione and the other β diketone compound is 2,2,6,6-tetramethyl-3,5-heptanedione.

Claim 17 (Currently Amended): A raw material solution comprising an organic solvent and an the organozirconium composite of any one of claims 1-4 dissolved in the organic solvent.

Claim 18 (Original): A raw material solution comprising an organic solvent and an organozirconium composite obtained by the synthesis method of claim 9 dissolved in the organic solvent.

Claim 19 (Original): A raw material solution containing an organozirconium composite, comprising an organic solvent, and a first zirconium chelate complex in which a single kind of a β diketone compound is coordinated to a center metal and a second zirconium chelate complex in which a single kind of a β diketone compound different from the β diketone compound is coordinated to a center metal, which are dissolved in an organic solvent.

Claim 20 (Original): The raw material solution according to claim 19, wherein a mixing ratio of first and second zirconium chelate complexes, that is, a mixing ratio of a first zirconium chelate complex C_1 with a second zirconium chelate complex C_2 , (C_1/C_2), is from 10/90 to 90/10 in terms of molar ratio.

Claim 21 (Original): The raw material solution according to claim 19, wherein the first and second zirconium chelate complexes are complexes selected from the group consisting of tetrakis-2,6-dimethyl-3,5-heptanedionate zirconium, tetrakis-2,2,6,6-tetramethyl-3,5-heptanedionate zirconium, tetrakisacetylacetonate zirconium, tetrakis-hexafluoroacetylacetonate zirconium, tetrakis-trifluoroacetylacetonate zirconium, tetrakis-trimethyloctanedionate zirconium and tetrakis-diphenylpropanedionate zirconium.

Claim 22 (Original): The raw material solution according to claim 19, wherein the first zirconium chelate complex is tetrakis-2,2,6,6-tetramethyl-3,5-heptanedionate zirconium and the second zirconium chelate complex is tetrakis-2,6-dimethyl-3,5-heptanedionate zirconium.

Claim 23 (Original): The raw material solution according to claim 17, wherein the organic solvent comprises one, or at least two kinds of solvents selected from the group consisting of tetrahydrofuran, methyltetrahydrofuran, n-octane, iso-octane, hexane, cyclohexane, pyridine, lutidine, butyl acetate and amyl acetate.

Claim 24 (Original): The raw material solution according to claim 18, wherein the organic solvent comprises one, or at least two kinds of solvents selected from the group consisting of tetrahydrofuran, methyltetrahydrofuran, n-octane, iso-octane, hexane, cyclohexane, pyridine, lutidine, butyl acetate and amyl acetate.

Claim 25 (Original): The raw material solution according to claim 19, wherein the organic solvent comprises one, or at least two kinds of solvents selected from the group consisting of tetrahydrofuran, methyltetrahydrofuran, n-octane, iso-octane, hexane, cyclohexane, pyridine, lutidine, butyl acetate and amyl acetate.

Claim 26 (Original): The raw material solution according to claim 17, further comprising at least one of an organolead compound and an organotitanium compound.

Claim 27 (Original): The raw material solution according to claim 18, further comprising at least one of an organolead compound and an organotitanium compound.

Claim 28 (Original): The raw material solution according to claim 19, further comprising at least one of an organolead compound and an organotitanium compound.

Claims 29-34 (Canceled).

Claim 35 (New): A method of making a lead zirconate titanate thin film comprising forming the thin film by metal organic chemical vapor deposition of the organozirconium composite of claim 1 onto a heated substrate, wherein the composite is thermally decomposed prior to being deposited onto the substrate.

Claim 36 (New): A method of making a lead zirconate titanate thin film comprising forming the thin film by metal organic chemical vapor deposition of the organozirconium composite obtained by the method of claim 9 onto a heated substrate, wherein the composite is thermally decomposed prior to being deposited on the substrate.

Claim 37 (New): A method of making a lead zirconate titanate thin film comprising forming the thin film by metal organic chemical vapor deposition of the organozirconium composite obtained by the method of claim 13 onto a heated substrate, wherein the composite is thermally decomposed prior to being deposited on the substrate.

Claim 38 (New): A method of making a lead zirconate titanate thin film comprising forming the thin film by metal organic chemical vapor deposition of the raw material solution of claim 17 onto a heated substrate, wherein the solution is thermally decomposed prior to being deposited on the substrate.

Claim 39 (New): A method of forming a lead zirconate titanate thin film comprising forming the thin film by metal organic chemical vapor deposition of the raw material solution of claim 18 onto a heated substrate, wherein the solution is thermally decomposed prior to being deposited on the substrate.

Claim 40 (New): A method of making a lead zirconate titanate thin film comprising forming the thin film by metal organic chemical vapor deposition of the raw material solution of claim 19 onto a heated substrate, wherein the solution is thermally decomposed prior to being deposited on the substrate.